

ABSTRACT

The invention includes a method of fabricating a laser device, that includes:
depositing a photoresist on epitaxially grown layers, patterning said photoresist to form
5 an aperture area, depositing a dielectric material on said patterned photoresist, depositing
a liftoff layer on said dielectric material, removing portions of said dielectric material and
liftoff layer that border said aperture area, implanting regions of the epitaxially grown
layers bordering said aperture area, and depositing a metal layer on said dielectric
material. The invention also includes a device including: a substrate comprising
10 epitaxial layers and an aperture area, a dielectric mirror formed on top of said aperture
area and an implanted region within said epitaxial layers, said implanted region bordering
said aperture area.